

Fig. 1

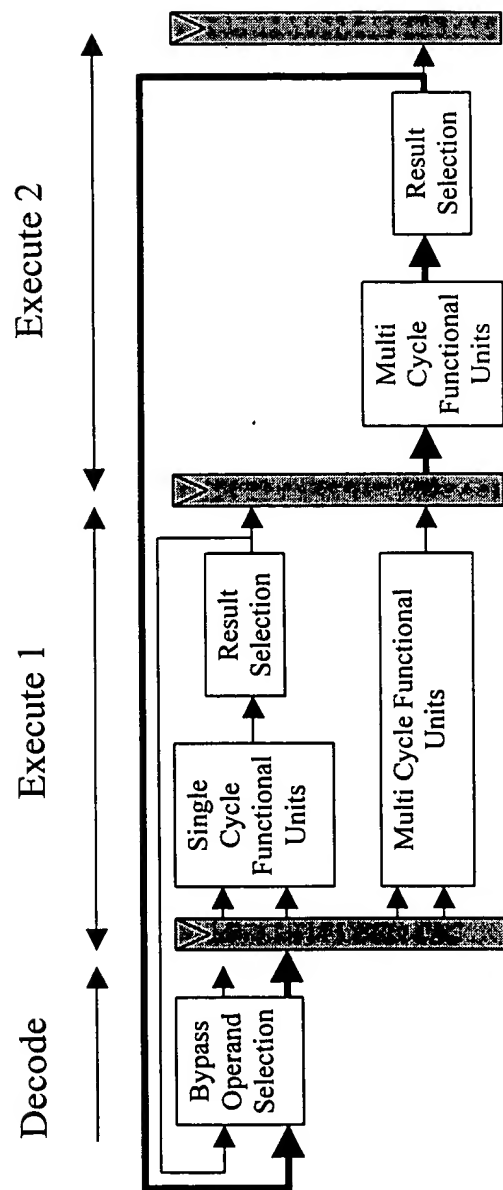


Fig. 2

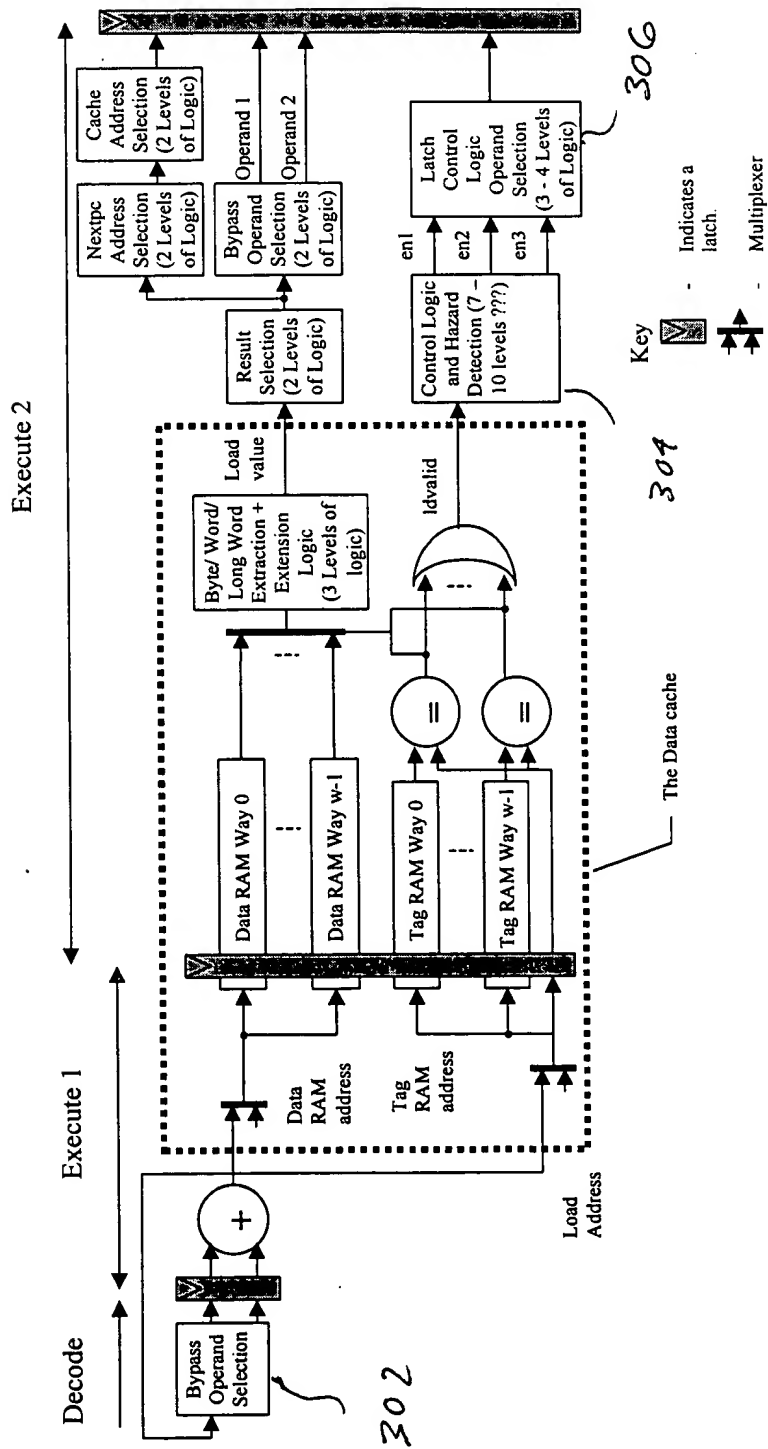


Fig. 3

Fig. 3a.

Pipeline Stage						
Reference Step	0	F	D	E1	E2	WB
350	Ld					
352	Mov	Ld				
354	Add	Mov	Ld			
356		Add	Mov	Ld		
358			Add	Mov	Ld	
360			Add		Mov/Ld	
362			Add		Ld	Mov
364				Add		Ld
366					Add	
368						Add

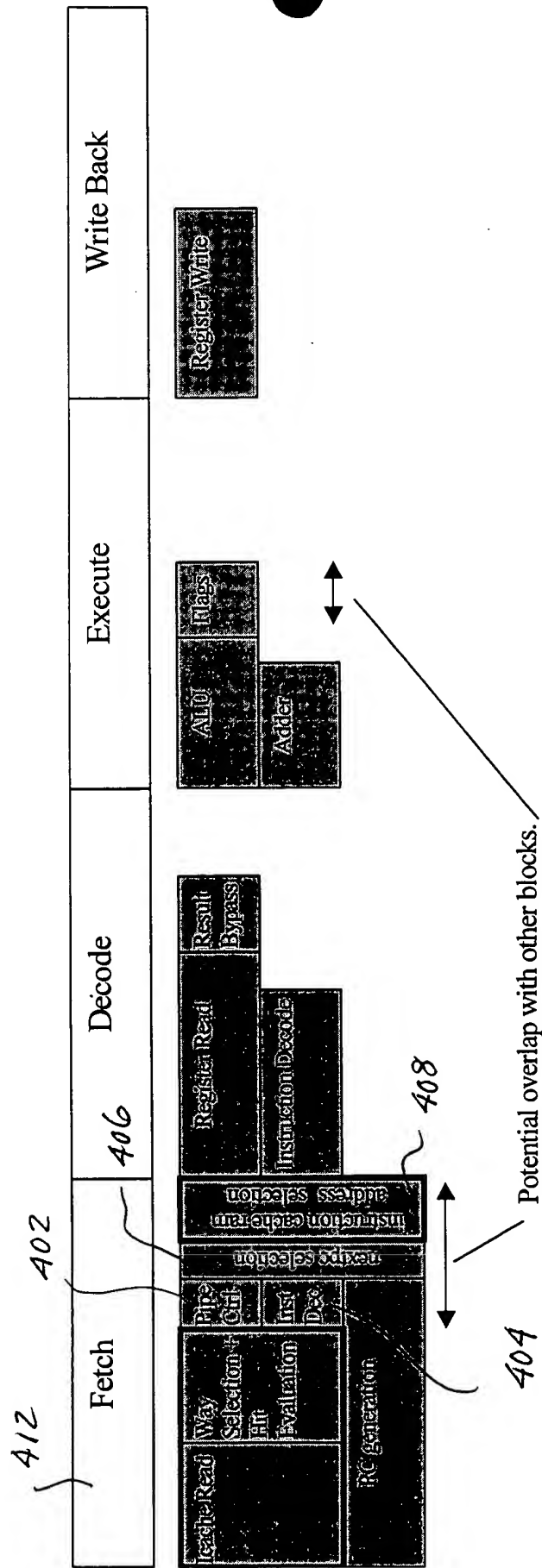


Fig. 4

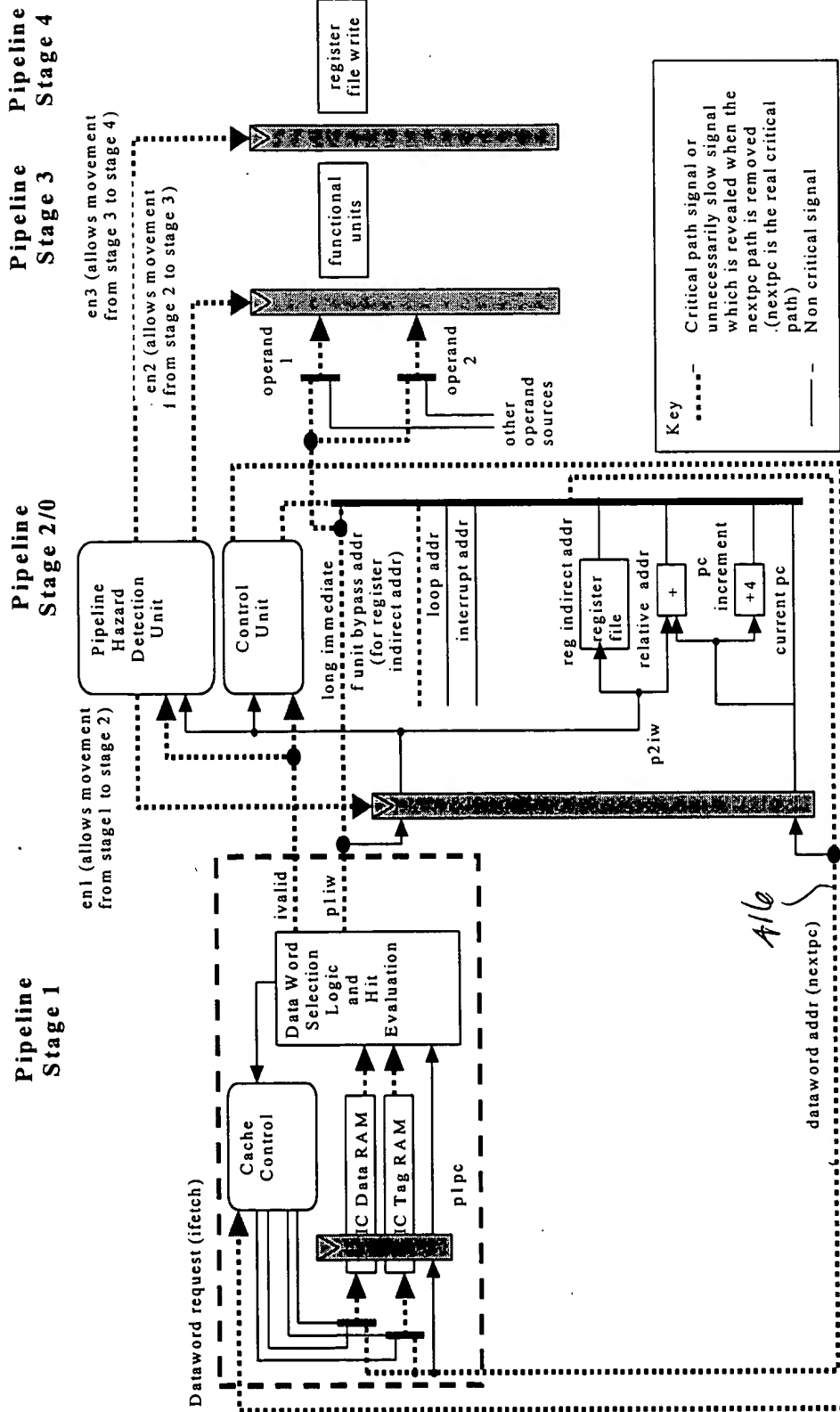
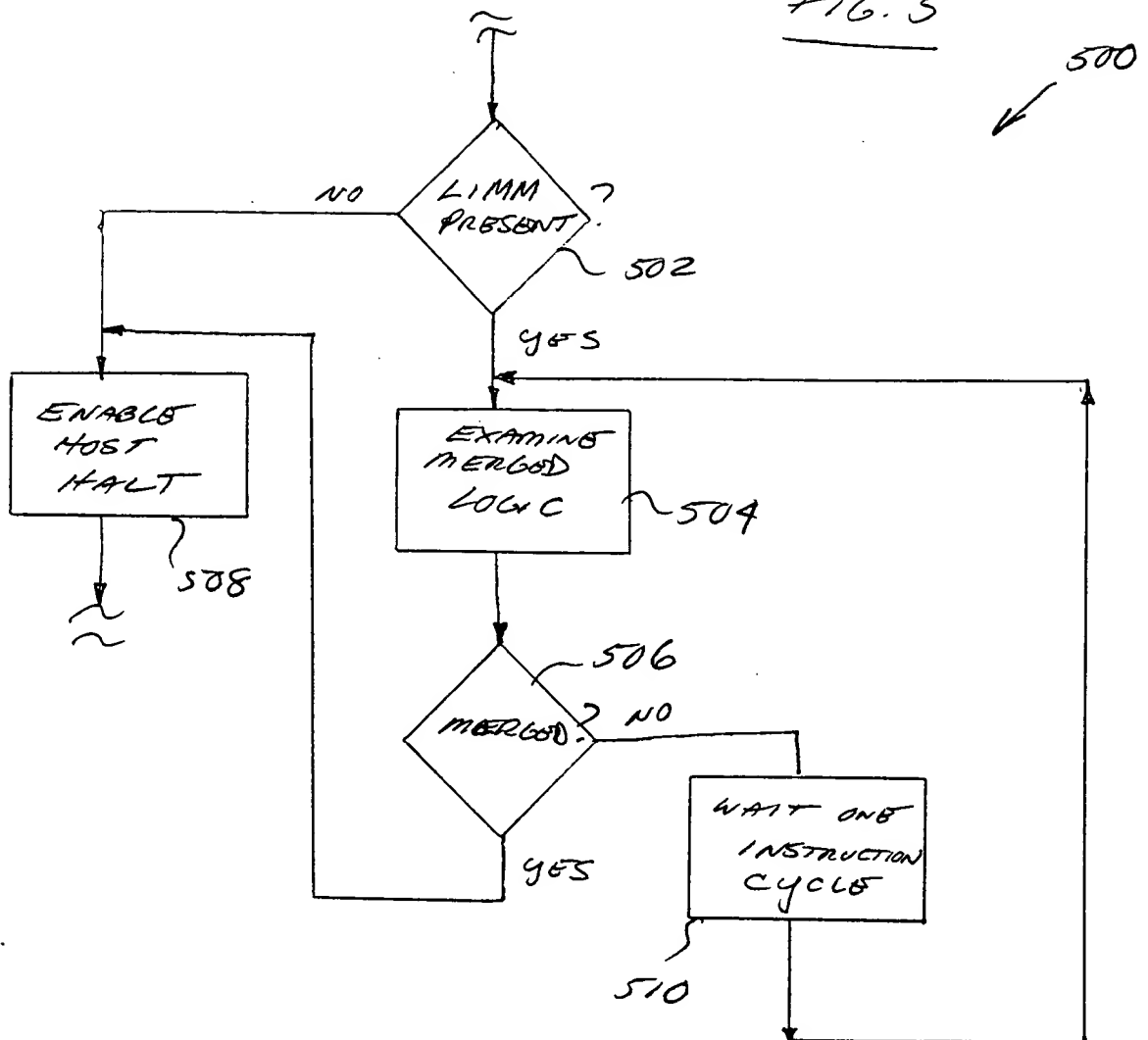


Fig. 4a

400

FIG. 5



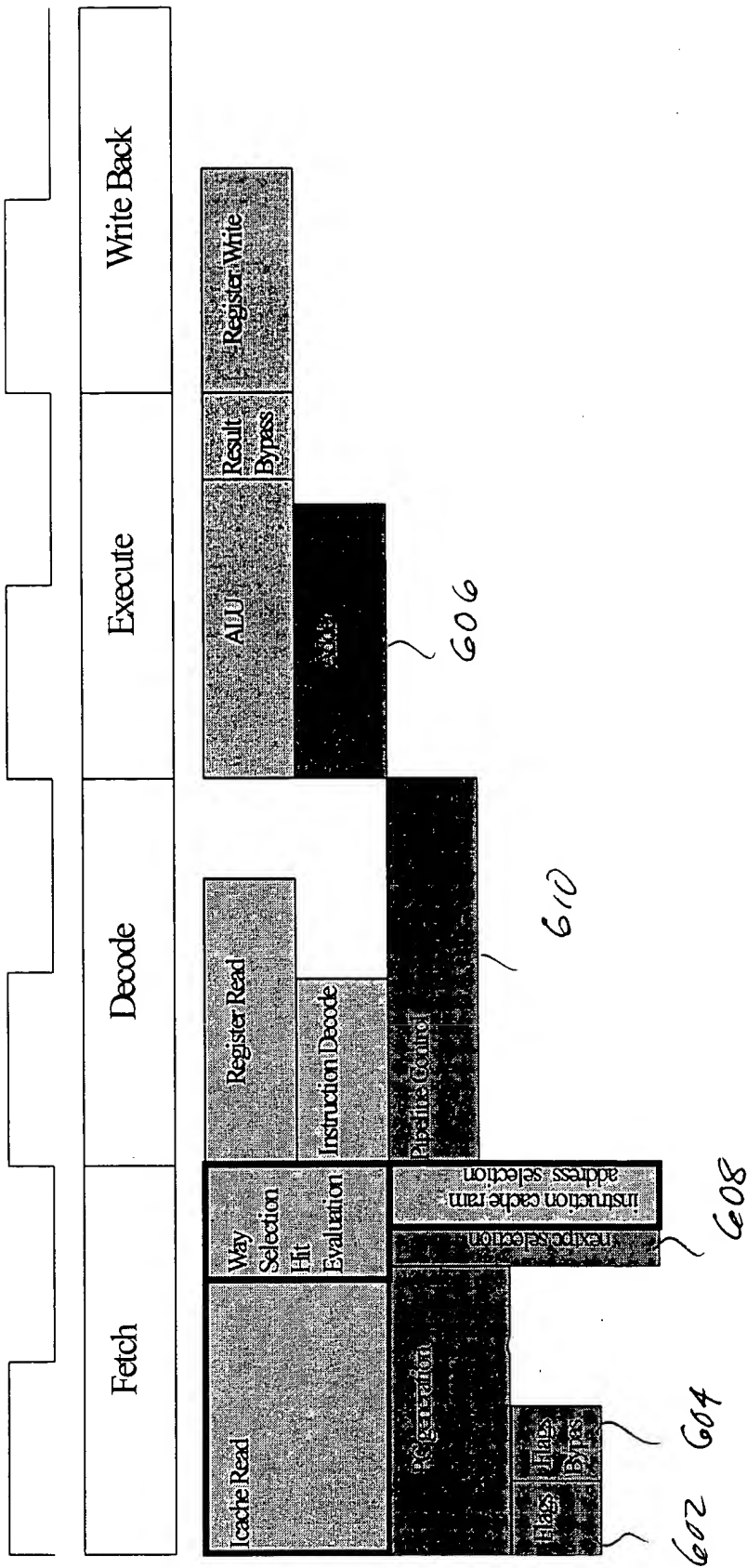


Fig. 6

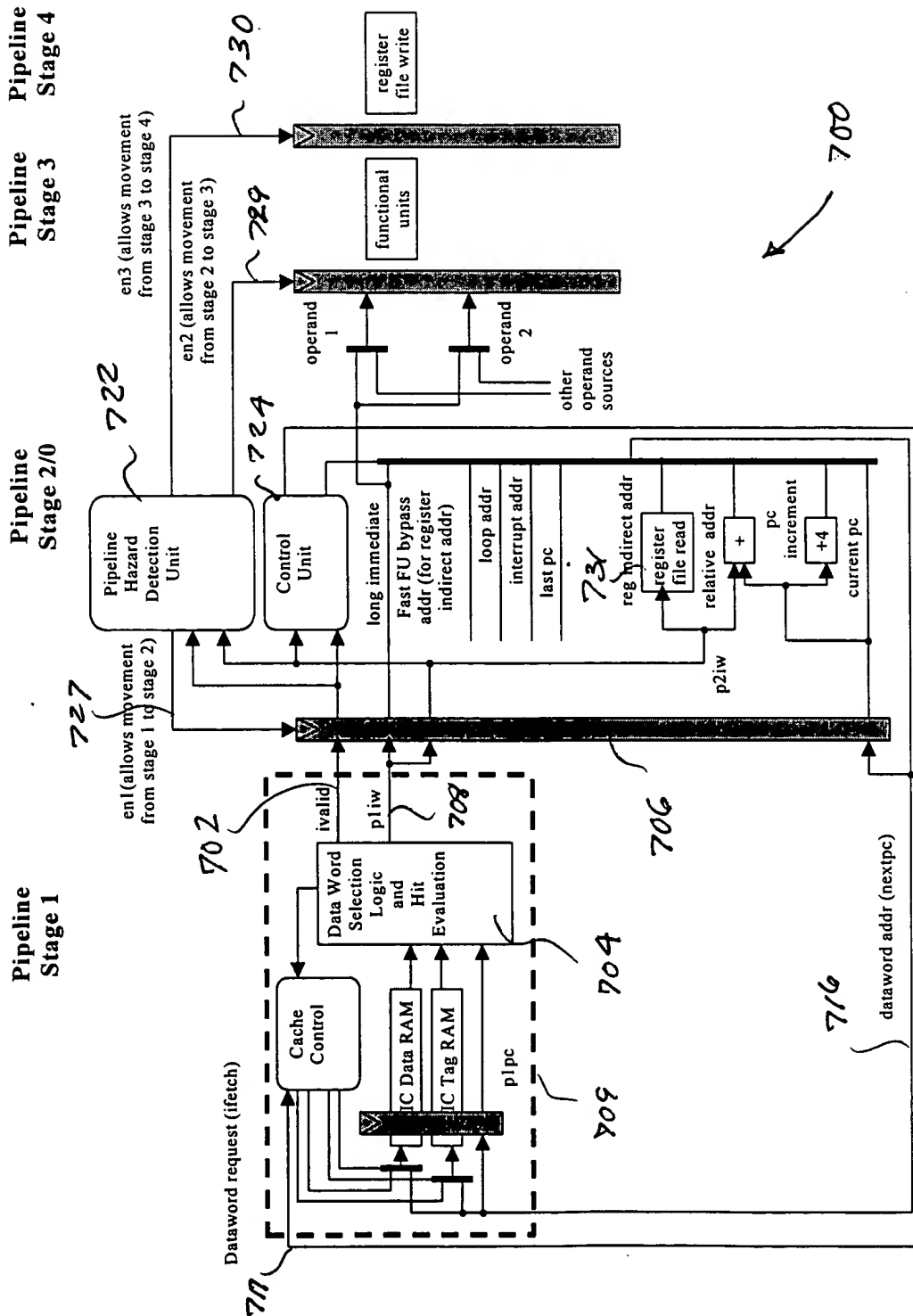


Fig. 7

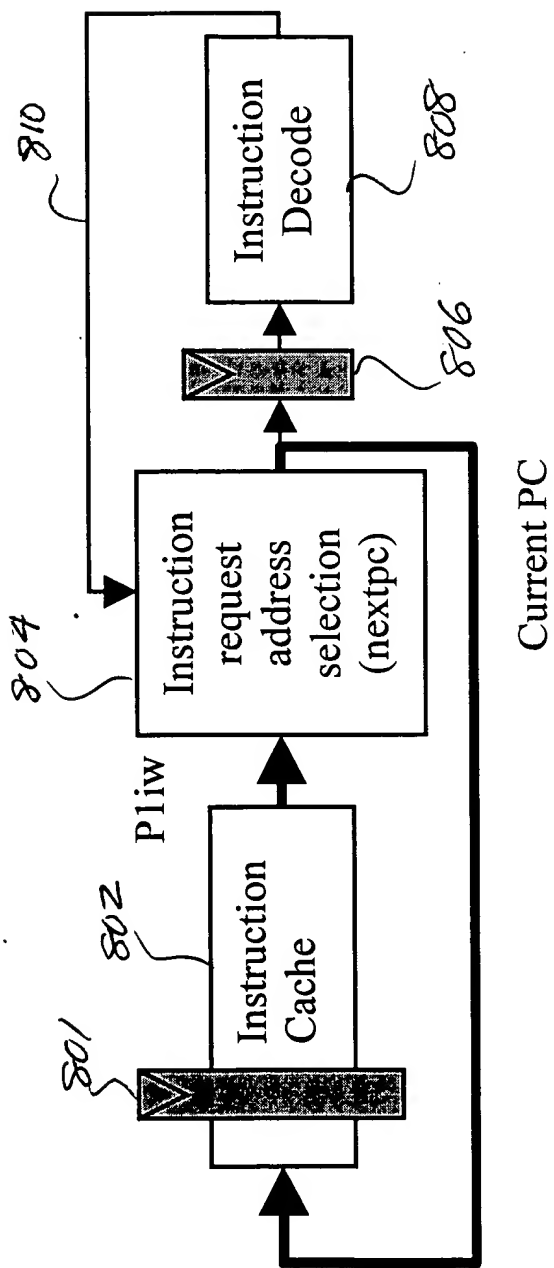


Fig. 8

800

Fig. 8a

Reference Step	Instruction Fetch Address (Inst Addr: next_pc)	Pipeline Stage			
		Fetch (Inst Addr: current_pc)	Decode (Inst Addr: last_pc)	Execute	Write- back
820	J.d _A				
822	Brk _B	J.d _A			
824	Target _C	Brk _B	J.d _A		
826		Target _C	Brk _B	J.d _A	
828			Brk		J.d _A
			Restart		
830			Brk		
			Restart		
832	Add _B		Brk		
			Restart		
834	Target _C	Add _B			
836	Target2 _C	Target _C	Add _B		
838	Target3 _C	Target2 _C	Target _C	Add _B	

Fig. 8b

Reference Step	Instruction Fetch Address (Inst Addr: next_pc)	Pipeline Stage			
		Fetch (Inst Addr: currentpc)	Decode (Inst Addr: last_pc)	Execute	Write- back
840	Add _A				
842	Brk _B	Add _A			
844	Mov _C	Brk _B	Add _A		
846		Mov _C	Brk _B	Add _A	
848			Brk Restart		Add _A
850			Brk Restart		
852	Add _B		Brk Restart		
854	Mov _C	Add _B			
856	Mov _{2C}	Mov _C	Add _B		
858	Mov _{3C}	Mov _{2C}	Mov _C	Add _B	

Fig. 8c

Reference	Instruction Fetch Address (Inst Addr: next_pc)	Pipeline Stage			
		F (Inst Addr: currentpc)	D (Inst Addr: last_pc)	E	W
860	J.d _A				
862	Brk _B	J.d _A			
864	Target _C	Brk _B	J.d _A		
866		Target _C	Brk _B	J.d _A	
868			Brk Restart		
870			Brk Restart	J.d _A	
872	Add _B		Brk Restart	J.d _A	
874	Target _C	Add _B		J.d _A	
876	Target _{2C}	Target _C	Add _B	J.d _A	
878	Target _{3C}	Target _{2C}	Target _C	Add _B	J.d _A

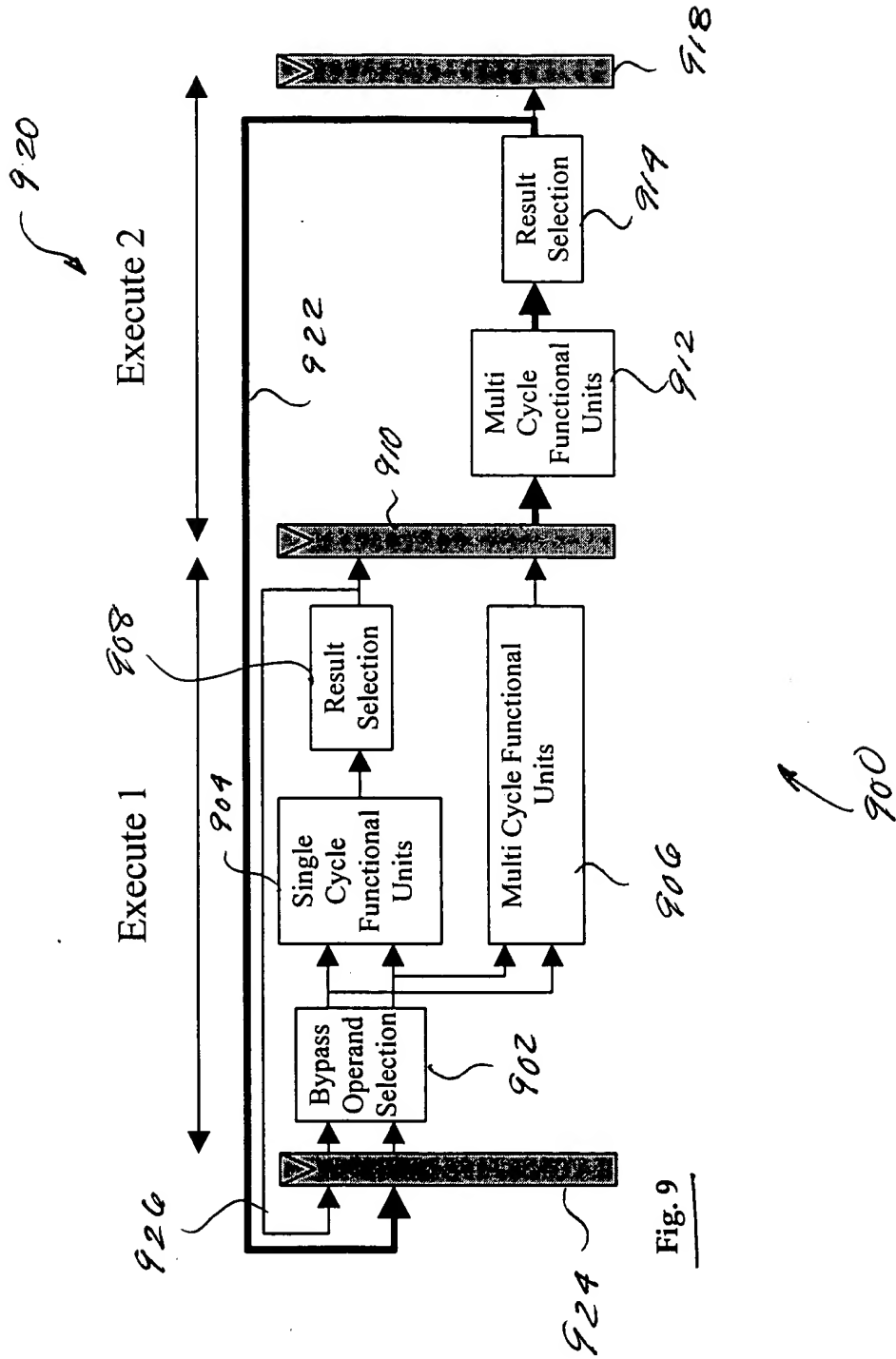
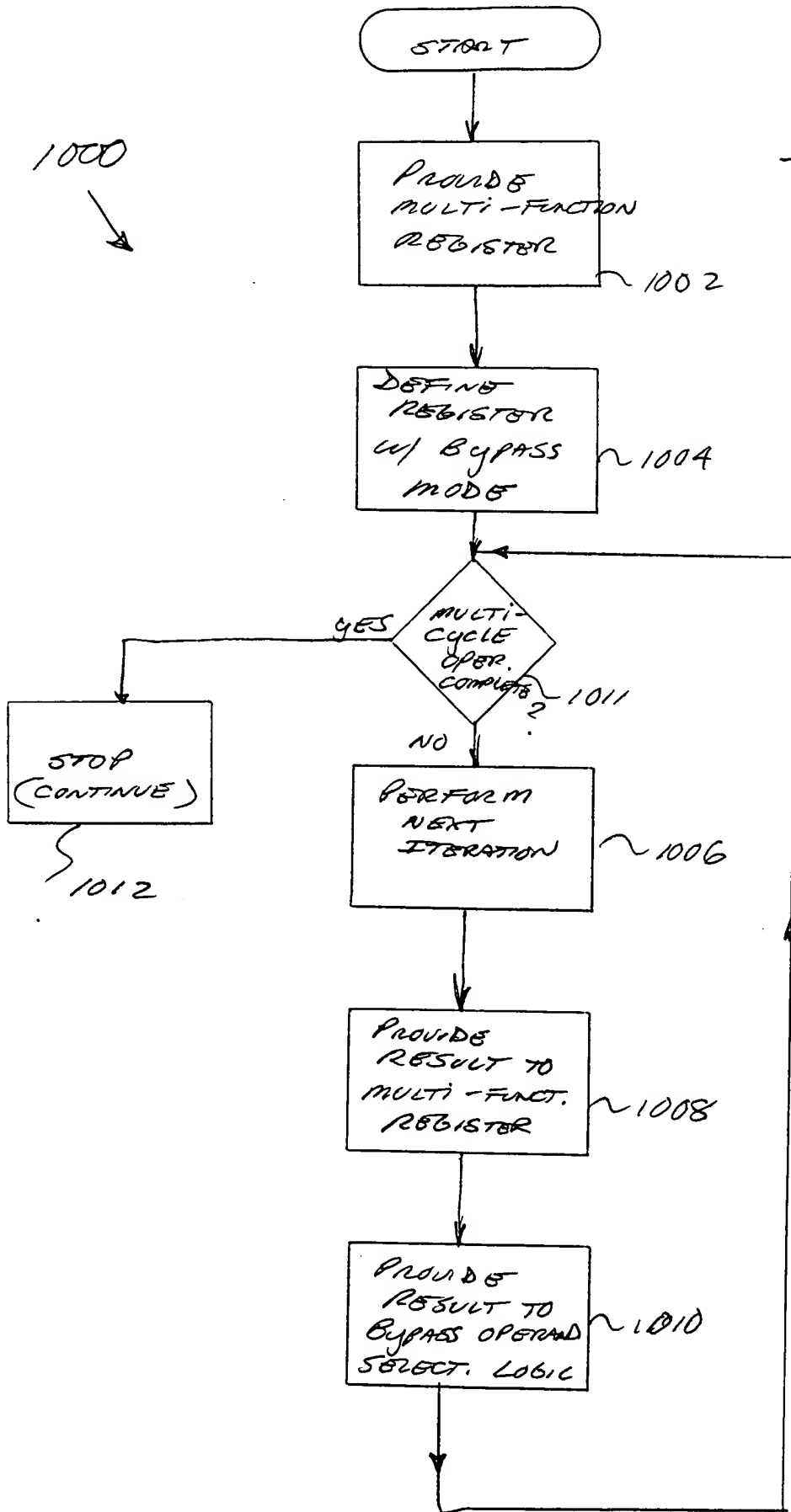


Fig. 9

1000

F76.10



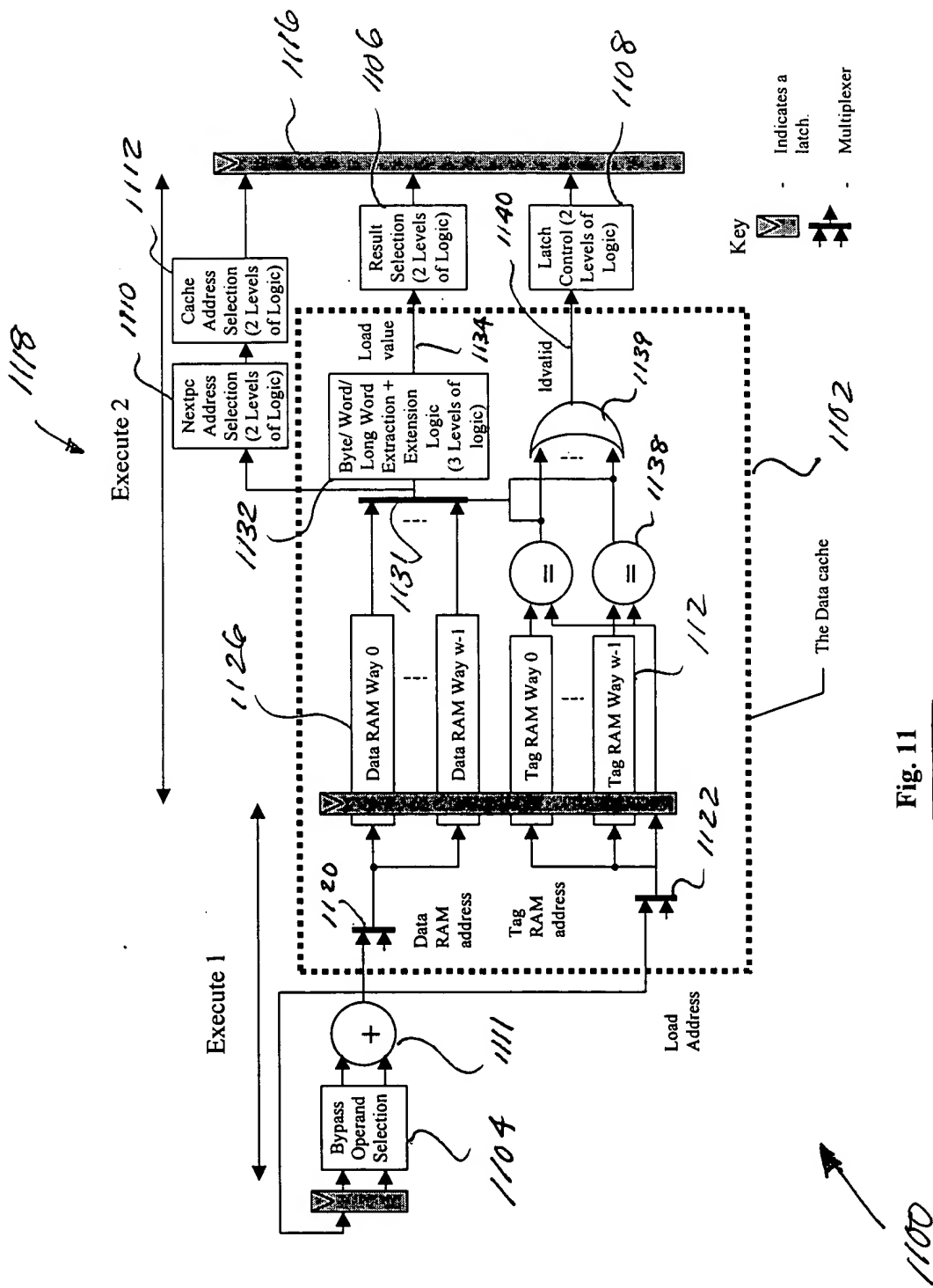
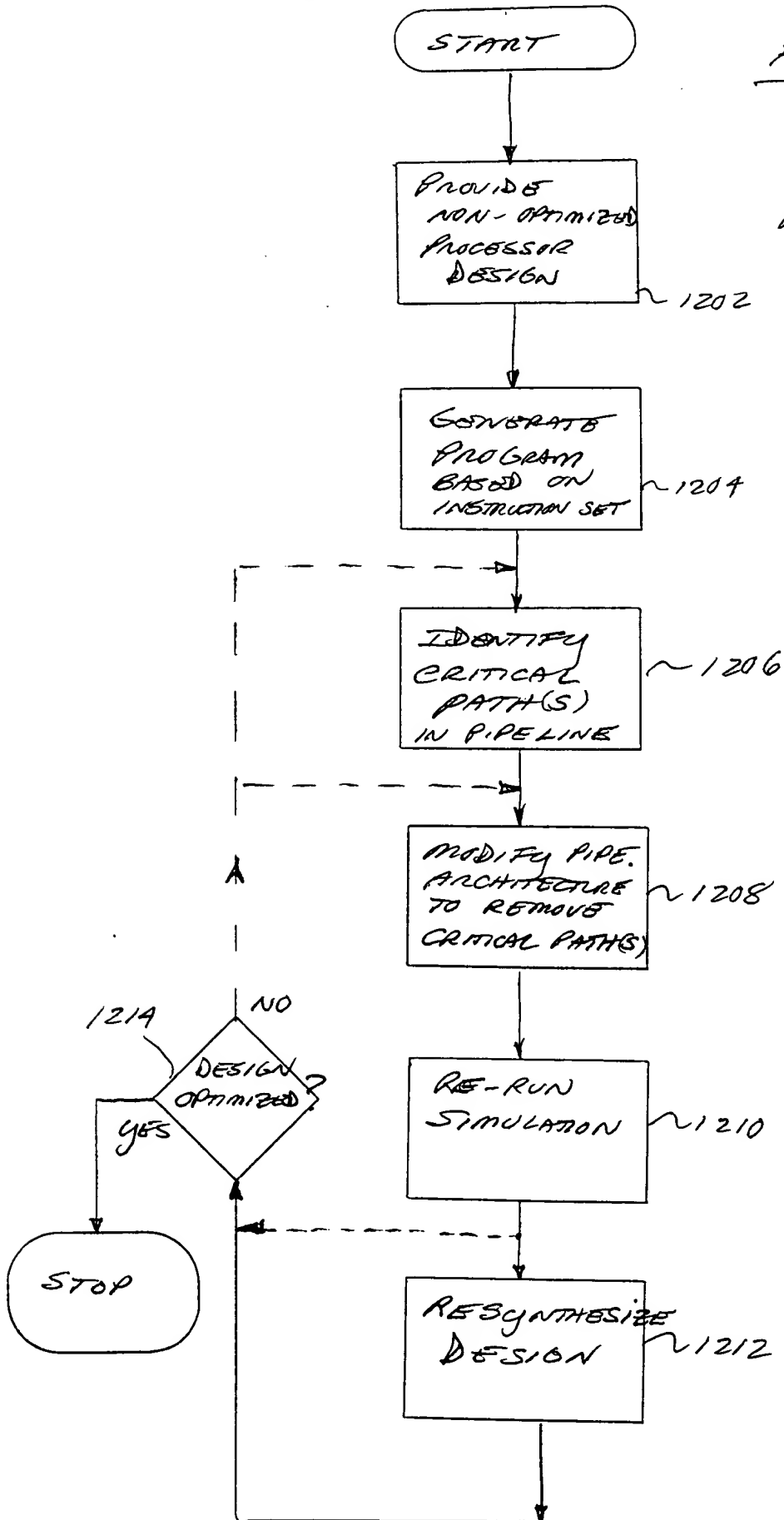


Fig. 11

Fig. 11a

Reference	Pipeline Stage					
	0	F	D	E1	E2	WB
1174	Ld					
1176	Mov	Ld				
1178	Add	Mov	Ld			
1180		Add	Mov	Ld		
1182			Add	Mov	Ld	
1184				Add	Mov/Ld	
1186				Add	Ld	Mov
1188				Add		Ld
1190					Add	
1192						Add

FIG. 12



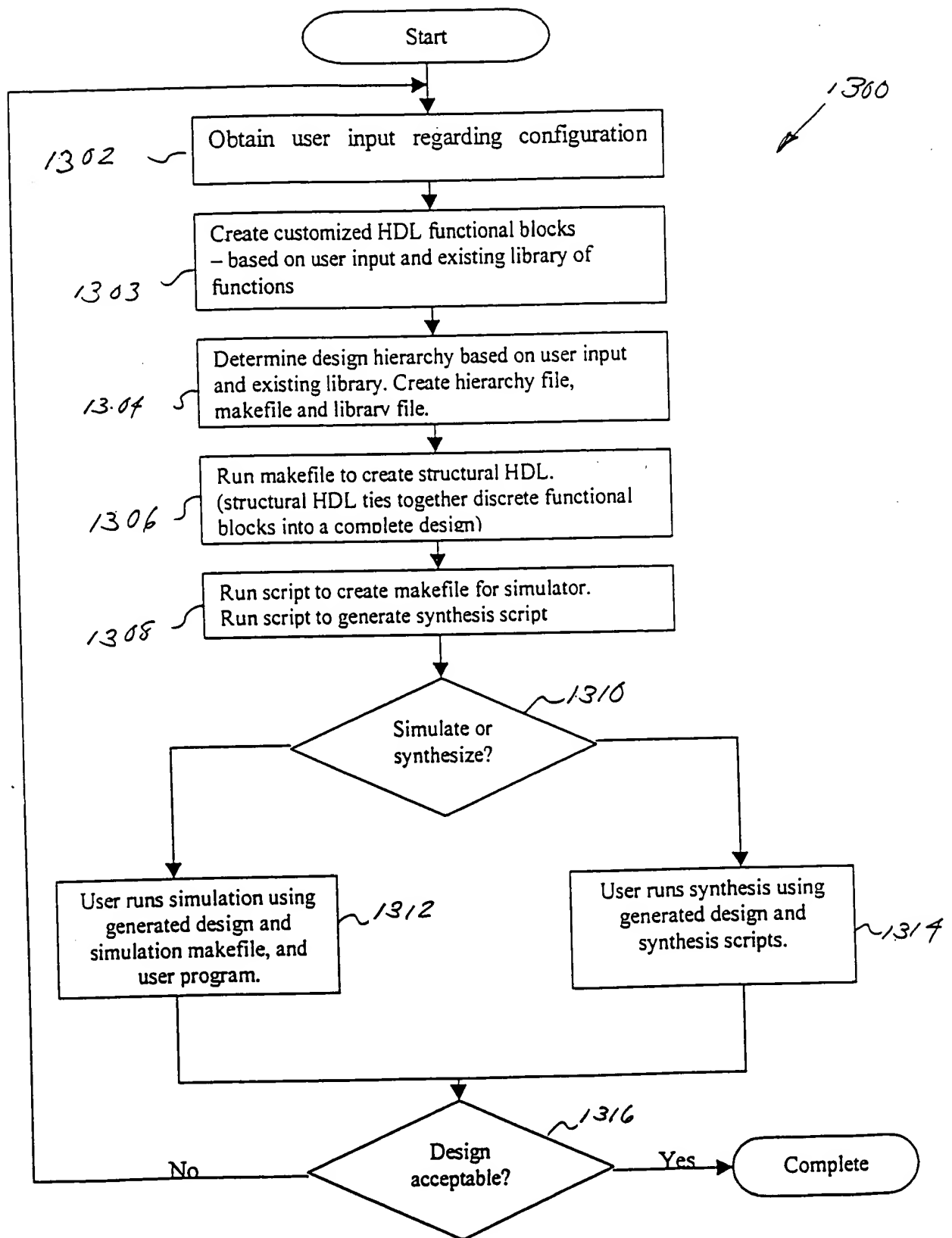


FIG. 13

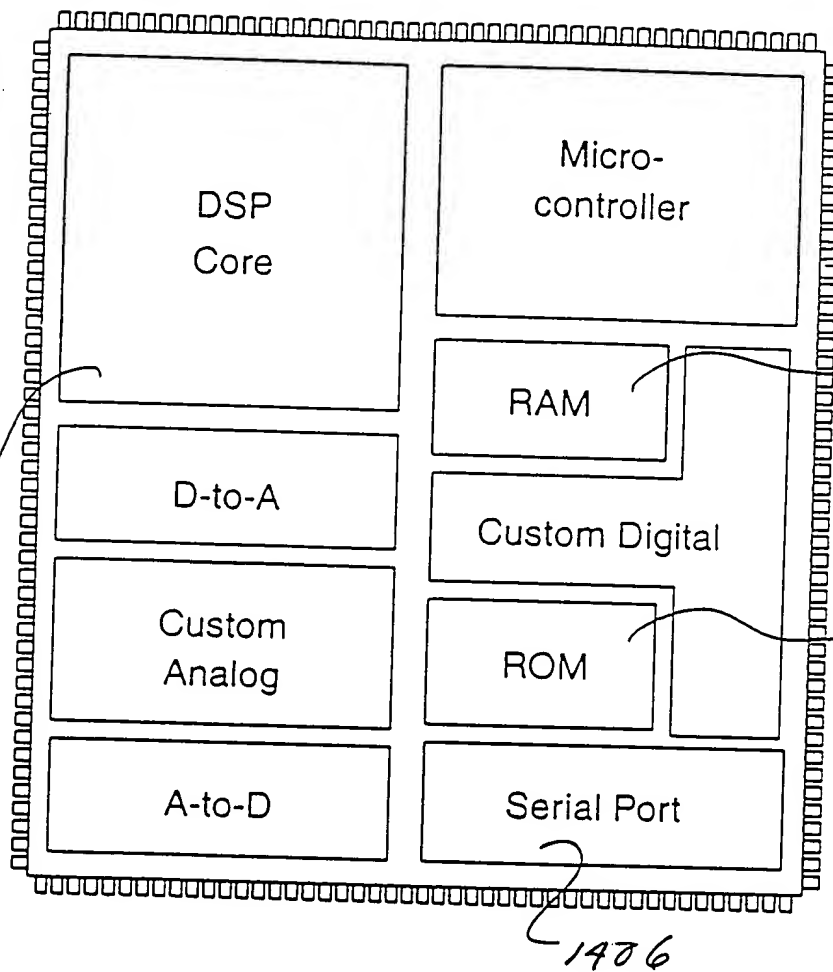


FIG. 1A

FIG. 15

